Approved for use through 10/31/2002. OMB 0651-0032

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Attorney Docket No. 500.42814X00 UTILITY First Inventor PATENT APPLICATION MATSUSHIMA, HITOSHI TRANSMITTAL Title **PLATE TYPE HEAT EXCHANGER** (Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Label No. Assistant Commissioner for Patents **APPLICATION ELEMENTS** Box Patent Application ADDRESS TO: Washington, DC 20231 SEE MPEP chapter 600 concerning utility patent application contents 1. 🛛 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission Applicant claims small entity status. fif_applicable, all necessary) See 37 CFR 1.27. a. Computer Readable Form (CRF) b. Specification Sequence Listing on: з. 🖂 [Total Pages: 14] Specification i. . CD-ROM or CD-R (2 copies); or -Descriptive title of the invention -Cross Reference to Related Applications ii. . D paper -Statement Regarding Fed sponsored R & D -Reference to sequence listing, a table, c. Statements verifying identity of above copies or a computer program listing appendix -Background of the Invention ACCOMPANYING APPLICATION PARTS -Brief Summary of the Invention -Brief Description of the Drawings (if filed) -Detailed Description Assignment Papers (cover sheet & documents(s)) -Claim(s) -Abstract of the Disclosure Power of Attorney 37 CFR 3.73(b) Statement (when there is an assignee) 4. 🔯 Drawing(s) (35 U.S.C. 113) [Total Pages: 3] English Translation Document (if applicable) 5. Oath or Declaration [Total Pages: 5] Copies of IDS Citations Information Disclosure Newly executed (original or copy) Statement (IDS)/PTO-1449 Copy from a prior application (37 CFR 1.63 (d)) **Preliminary Amendment** (for continuation/divisional with Box 18 completed) Return Receipt Postcard (MPEP 503) (Should be specifically itemized) i. DELETION OF INVENTOR(S) 15. Certified Copy of Priority Document(s) Signed statement attached deleting inventor(s) (if foreign priority is claimed) Named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b) Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 Application Data Sheet. See 37 CFR 1.76 or its equivalent. 17. Other: Information Disclosure Sheet Under 37 CFR 1.56(a) w/refs., Credit Card Payment Form, Figs. 1-3 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.: Prior application information: Examiner: _ Group Art Unit: __ For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS 020457 Customer Number or Bar Code Label or Correspondence address below (Insert Customer No. or Attach bar code label here) ANTONELLI, TERRY, STOUT & KRAUS, LLP Address State City Code Telephone Country (703) 312-6600 Fax (703) 312-6666 Registration No. (Attorney/Agent) Name Alan E. Schravelli 32,087 Signature Date June 24, 2003

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Signature

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	for	FY	2003	3

Complete if Known				
Application Number				
Filing Date	June 24, 2003			
First Named Inventor	MATSUSHIMA, HITOSHI			
Examiner Name				

Effective 01/01/2003. Patent fees are subject to annual revision.

Art Unit

Applicant claims small entity status. See 37 CFR 1.27 TOTAL AMOUNT OF PAYMENT (\$) 790.00Attorney Docket No. 500.42814X00 METHOD OF PAYMENT (check all that apply) FEE CALCULATION (continued) ☐ Check ☑ Credit Card ☐ Money Order ☐ Other ☐ None 3. **ADDITIONAL FEES** Large Small ☑ Deposit Account: Entity Entity Fee Fee Fee Fee Deposit Account Number 01-2135 Fee Description Fee Paid Code (\$) Code (\$) Deposit Account Name Antonelli, Terry, Stout & Kraus, LLP 130 1051 2051 65 Surcharge - late filing fee or oath The Commissioner authorized to: (check all that apply) 1052 50 2052 25 Surcharge - late provisional filing fee or ☐ Charge fees indicated below ☐ Credit any overpayments cover sheet Charge any additional fee(s) during the pendency of this 1053 130 1053 130 Non-English specification application Charge fees indicated below, except for the filing fee 1812 2.520 1812 2,520 For filing a request for ex parte reexamination to the above-identified deposit account. 1804 920* 1804 920* Requesting publication of SIR prior to Examination action **FEE CALCULATION** 1,840* 1805 1,840*Requesting publication of SIR after BASIC FILING FEE Examiner action Large **Entity Small Entity** 1251 110 2251 55 Extension for reply within first month Fee Description Fee Fee Fee Fee Fee Paid 1252 410 2252 205 Extension for reply within second month Code (\$) Code (\$) 750 1001 750 2001 375 Utility filing fee 1253 930 2253 465 Extension for reply within third month 1002 330 2002 165 Design filing fee 1254 1.450 2254 Extension for reply within fourth month 725 1003 520 2003 260 Plant filing fee 1255 1.970 2255 985 Extension for reply within fifth month 1004 750 2004 375 Reissue filing fee 1401 320 2401 160 Notice of Appeal 1005 160 2005 80 Provisional filing fee 1402 320 2402 160 Filing a brief in support of an appeal 1403 280 2403 140 Request for oral hearing SUBTOTAL (1) 750 1451 1.510 1451 1,510 Petition to institute a public use proceeding 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE 1452 110 2452 55 Petition to revive - unavoidable Fee from 1453 1.300 2453 650 Petition to revive - unintentional Extra Claims Fee Paid below **1**501 1.300 2501 650 Utility issue fee (or reissue) Total Claims 8 -20** = 0 x 0.00 0.00 2502 1502 470 235 Design issue fee Indep. 0.00 x 0.00 1503 630 2503 315 Plant issue fee Multiple Dependent 0.00 0.00 1406 130 1460 130 Petitions to the Commissioner 1807 50 1807 Processing fee under 37 CFR 1.17(q) arge Entity Small Entity 806 180 1806 180 Submission of Information Disclosure Stmt Fee Fee Fee Fee Description Fee 8021 40 8021 40 Recording each patent assignment per Code (**\$**) 18 Code (\$) Claims in excess of 20 property (times number of properties) 40.00 1202 2202 1809 Filing a submission after final rejection 750 2809 375 1201 84 2201 42 Independent claims in excess of 3 (37 ČFR § 1.129(a)) For each additional invention to be 1810 750 2810 375 Multiple dependent claim, if not paid 1203 280 2203 140 examined (37 CFR § 1.129(b)) 1204 84 2204 42 ** Reissue independent claims 1801 750 2801 375 Request for Continued Examination (RCE) over original patent 1802 900 1802 900 Request for expedited examination of a design application 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent Other fee (specify) SUBTOTAL (2) \$ 0.00 or number previously paid, if greater; For Reissues, see above. *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 SUBMITTED BY Complete (if applicable) Registration No. Alan E 8chiayelli Name (Print/Type) (Attomey/Agent) 32.087 Telephone 703-312-6600

> WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.